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Lebanon Water and Wastewater Sector Support

QUARTERLY REPORT: OCTOBER , 2011—DECEMBER, 2011

January, 2012

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LEBANON WATER AND WASTEWATER SECTOR SUPPORT

QUARTERLY REPORT: OCTOBER, 2011—DECEMBER, 2011

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ACRONYMS

ACWUA	Arab Countries Water Utilities Association	IWRM	Integrated Water Resource Management
AFD	French Development Agency	KPI	Key Performance Indicator
AWP	Annual Work Plan	LWWSS	Lebanon Water and Wastewater Sector Support
APP	Annual Work Plan	MIS	Management Information Ssystem
ATP	Annual Training Plan	MMS	Maintenance Management System
BMLWE	Beirut and Mount Lebanon Water Establishment	MOEW	Ministry of Energy and Water
BWE	Beka'a Water Establishment	MOF	Ministry of Finance
CAS	Central Administration of Statistics	MOTGE	Mise en place des Outils Techniques de Gestion de l'Eau
CDG	Chairman and Director General	NLWE	North Lebanon Water Establishment
CDM	Camp, Dresser and McKee Engineering	NRW	Non Revenue Water
CDR	Council for Development and Reconstruction	O&M	Operations and Maintenance
CIP	Capital Improvement Plan	PMP	Performance Monitoring Plan
CO	USAID Contract Office	PSP	Private Sector Participation
CQCP	Construction Quality Control Plan	PPP	Public Private Partnership
CSR	Customer Service Representative	SCADA	System Control and Data Acquisition
COP	Chief of Party	SLWE	South Lebanon Water Establishment
COTR	Contract Officer Technical Representative	SMP	Subcontractor Management Plan
DG	Director General	STTA	Short-Term Technical Assistance
DAI	Development Alternatives Inc.	TOR	Terms of Reference
DCOP	Deputy Chief of Party	USAID	United States Agency for International Development
EIB	European Investment Bank	WE	Water Establishment
EU	European Union	WPS	Water Pumping Stations
EA	Environmental Assessment	WWTP	Wastewater Treatment Plant
EDL	Electricite du Liban (National Electricity Provider)		
EMMP	Environmental Monitoring and Mitigation Plan		
ERP	Enterprise Resource Plan		
FAS	Financial & Accounting System		
GA	Geographical Area		
GIS	Geographical Information System		
GIZ	Gezellshaft fur Internationale Zusammenarbeit		
GOL	Government of Lebanon		
GTZ	German Technical Assistance		
HPIP	High Priority Intervention Program		
HR	Human Resources		
IAR	Initial Assessment Report		
IEE	Initial Environmental Evaluation		
IFI	International Financial Institution		
IRG	International Resource Group		
IRM	Information Resources Management		
IT	Information Technology		

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LWSS Counterparts and Primary Contacts

Beirut-Mount Lebanon Water Establishment (BMLWE)
 Beka'a Valley Water Establishment (BWE)
 North Lebanon Water Establishment (NLWE)
 South Lebanon Water Establishment (SLWE)
 Ministry of Energy and Water
 MOEW Advisor to Minister (Water)
 MOEW Advisor to Minister (Wastewater)

Joseph Nseir
 Maroun Msallem
 Jamal Krayem
 Ahmed Nizzam
 Ghassan Beydoun
 Abdo Tayar
 Randa Nemer

A. INTRODUCTION

The Lebanon Water and Wastewater Sector Support (LWWSS) Program is a \$34 million, 67-month (October 2009 - April 2015) program funded by USAID and implemented by Development Alternatives, Inc. (DAI). LWWSS provides technical assistance and related services to impact USAID/Lebanon's Assistance Objective (AO) 4 - "Improved water services for all in Lebanon" - and the corresponding Intermediate Results (IRs) - More efficient management of water resources, improved water infrastructure, and enhanced water governance.

LWWSS works in cooperation with the Ministry of Energy and Water (MOEW) to assist Lebanon's four Water Establishments (WEs) in strengthening their capacity to deliver high-quality and sustainable services. Ultimately, the LWWSS program aims to help the Water WEs advance towards financial and operational sustainability and overcome the many challenges they face, including staff shortages and an aging workforce, poor customer relations, low tariffs that fail to recover operating costs, lack of metering, excessive non-revenue water, and underinvestment in the water and wastewater infrastructure.

The areas of focus that LWWSS targets in working with the WEs include:

- Building management capacity within the WEs;
- Increasing financial management capacity and financial systems integration;
- Procuring equipment to complement technical assistance and capacity building;
- Business planning to increase capital planning and benchmarking capacity;
- Funding urgent infrastructure works to enhance delivery or access and coverage;
- Developing a corporate culture, customer service orientation and public outreach programs.

Based on the initial LWWSS program objectives of building on previous USAID and other donor program progress and as a result of lessons learned during the first two years of the program, LWWSS has focused on implementing its Year Three Work Plan within specific areas of Water Establishment (WE) operations. The LWWSS program has therefore tailored the individual WE work plans to apply the information gathered on each WE and to leverage the successes accomplished to date.

This Quarterly Report covers the period from October - December 2011 and provides quarterly highlights, component updates that provide technical perspective, and then details progress of project activities broken down by each Water Establishment and then further by each component, as per the Year 3 Workplan. Each component consists of several activities and progress of each is depicted in the accompanying Gantt charts (with mention of the percentage of completion as of the end of December) and detailed in the narrative. See Annex 2 for the full list of Year 3 activities by Component.

B. QUARTERLY ACTIVITY HIGHLIGHTS

Project Additional Funding



Tour of the the Buhshas-Masafi HAB Water Treatment Station

In October, USAID advised LWWSS that its request to fund demand-driven infrastructure works under Component Six of the program had been approved. The addition of \$14,852,153 to the existing contract brings the total program ceiling to \$34,360,315. The purpose of the follow-on funding is to provide essential small- and medium-capital projects that are integrated with other LWWSS programs. These works will support the three neediest WEs with priority investments. In the NLWE the infrastructure work will connect approximately 8,000 households to the existing system originally installed by CDR about eight years ago. Each newly connected household will also receive a water consumption meter.

This activity meets the LWWSS objective of increasing the coverage of the WE as well as providing the basis of reducing the non-revenue water. Metering both the source, and consumption are a part of the overall process of reducing water losses by identifying parts of the metered system that are consuming more than the expected average.

In the BWE the infrastructure work will replace old water lines serving five subdivisions of Zahle, and improve the service for approximately 8,500 people. The water supply line replacement project will also reduce water loss. This, coupled with corresponding reductions in the costs of well and system pumping, as well as water treatment, all of which will improve the financial capacity of the WE.

In the SLWE the infrastructure work will rehabilitate up to six major pump stations. The pump stations are fed by seven wells, two springs, and surface water. The impact of this rehabilitation project will be to increase the water volume and reliability of service to approximately 80,000 people. This option, as opposed to selecting several single source wells, was chosen as the highest priority by the director general of the SLWE. The initial assessment of each of the five pump stations will provide an approximate cost for each and determine how many of the five LWWSS resources can improve.

Certificates of Achievement for NLWE Pump Station Operations and Maintenance Training

The Lebanon Water and Wastewater Sector Support Program provided training to 51 NLWE pump station operators. The purpose of the training was to increase the operating and maintenance proficiency of the pump station operators. This was done through training materials tailored to the specific NLWE pump station operator gaps in knowledge, skills and experience. In addition, trainees also learned about safety and daily data collection. The training presented both classroom and on-site training. The classroom training covered some theory, but applied that theory to actual equipment (pump and motor cutouts). Additionally, the on-site portion of the training – held in pump stations where many of the training participants work (Tripoli, Hab, and Halba) -- added to the relevance of the training. Nine regional departments participated in the training: Batroun, Koura, Zhgharta, Tripoli, Becharri, Halba, Qbayat, Minieh and Dunniyeh.

The results of the training include more efficient operation of the pump stations, better safety, and better data recording of pump station operations. This latter part is essential for proper maintenance and replacement of the pump station equipment.



From Left to right: Heath Cosgrove, Director of USAID Economic Development, Jamal Krayem, Director General of the North Lebanon Water Establishment, Sam Coxson, Chief of Party for LWWSS, and Engineer Doumit El Alam.

C. OVERVIEW OF PROGRESS THIS QUARTER

Progress Summary

The first quarter of year three was activity intensive since LWWSS carried on the technical assistance and began implementing the additional infrastructure project work. We initiated equipment procurements, recruitment for the infrastructure work specialists, and assessed alternatives for additional office space.

Perspective

The addition of infrastructure work profoundly increases the complexity of the LWWSS project and carries with it additional risks, such as the risk of non-completion of construction, and risk of errors and omissions by the consulting engineering firms for the construction design and specification development stage of the process. However, LWWSS is confident that these risks can be managed and overcome to produce high, positive impact infrastructure projects. The increased funding for infrastructure will be allocated to three of the four water establishments.¹

The first quarter of year three underscores the need for the project to bring equipment procurement along at a faster clip than in the previous quarters. The first, second and third quarters of year three will see an accelerated procurement pace, (bidding, manufacturing, delivery and installation) and infrastructure construction (tendering for engineering consulting firms, selection, preliminary design and final design, tendering the construction and equipment and then actual construction).

D. COMPONENT UPDATES

1. Component One: Initial Assessment Report and High Priority Intervention Plan

Completed, as reported previously.

2. Component Two: Strengthened Capacity for Managerial, Technical and Operational Efficiency

Technical assistance to the four water establishments is guided by contract deliverables, the annual work plan, and training and procurement plans developed with each WE and approved by USAID. There are a number of contract deliverables associated with component two², although these are dynamic given the fact that LWWSS is flexible in its design and governed by

¹ When approached for possible infrastructure project candidates, the BMLWE Director General, Joseph Nseir, stated that he did not need additional infrastructure projects and requested that LWWSS continue on its capacity building and ERP efforts and to complete the Jeita pump station equipment procurement.

² There are 42 deliverables in the LWWSS contract listed in Section F of the contract. Of these, the following numbered deliverables apply to component two: 5, 8, 9, 17, 18, 19, 39, 40. Some deliverables can be listed in more than one component given their nature. For example acquiring new software involves procurement, training and implementation, or components 2, 3, and 5. Please see Annex A for the title and list of components.

the aforementioned plans developed through consensus with the WEs. Capacity building is the focus of this component, however, capacity building is greatly affected by the level of modernization within any organization, and the staff's ability to adopt and implement information processing equipment. That is, the provision of new software and new computers allow an organization to reengineer how information and decision-making are done whether at the supervisory level or top management.

Therefore, the activities under component two are designed to maximize LWWSS efforts with the support and commitment of top WE management, middle management, and supervisory level staff through building consensus of the training to be carried out.

Additionally, during this quarter, LWWSS began coordinating with the UNDP's two-year "Groundwater Assessment and Database" project which is funded by the Italian Government. This project will assess the groundwater at the national scale and establish a database and water library at the MOEW. We met with ELARD, UNDP's subcontractor to share data, specifically data from the detailed pump station survey, in order to accelerate and improve the accuracy of its analysis of groundwater conditions throughout the country.

3. Component Three: Increased Financial and Commercial Viability and Operational Efficiency

LWWSS issued a request for proposal that envisioned and called for increasing the financial and commercial viability and operational efficiency of selected WEs.³ This entails training allocated to component two: the modernization of business practices and decision-making models that allow top and middle management to make financial, human resource and other operational decisions in a timely fashion. One key tool in modernizing an organization's financial and functional decision-making and improving its viability is to establish an integrated software system combined with policies, procedures and practices that ensure financial and operational success.⁴

Progress in the BWE and BMLWE is discussed in the WEs' respective sections in this Quarterly Report. In general terms, the progress in BMLWE is on track. However, there has been a slowing down in the BWE pace of implementing changes to policies, procedures and practices that are now amended to align with requirements for the ERP. The slowdown is not totally unanticipated. The BWE has fewer trained finance department personnel and has less time to handle extra responsibilities beyond day to day activities. LWWSS, in crafting the subcontract with the system provider (EDM), anticipated this circumstance. EDM will place an IT specialist

³ This software is called enterprise resource planning (ERP) because its reach is throughout the whole enterprise using it. All aspects of the software are integrated; thus, allowing top management as well as the line supervisor to know where the organization is relative to its major activities whether it be financial, assets, manpower or planning.

⁴ There are 42 deliverables in the LWWSS contract listed in Section F of the contract. Of these, the following numbered deliverables apply to component three: 11, 12, 13, 14, 15, 16, 1318?, 19, 21, 23, 24, 28, 31, 32, 34, 38, 39, 41, 42. Some deliverables can be listed in more than one component given their nature. For example acquiring new software involves procurement, training and implementation or components 2, 3 and 5. Please see Annex A for the title and list of components.

within the BWE that will help the existing and to-be-hired staff in making adjustments to policies and practices to be able to implement the ERP system without undue difficulty. But this approach will, of necessity, take a longer period to carry out.

One benefit of selecting one ERP system for both entities is that lessons learned in the BMLWE implementation will be applied to the BWE implementation process. This slower pace in BWE is well within the time frame envisioned for implementation and helps ensure the system's sustainability through BWE staff acceptance and application.

Another essential tool that cuts across all disciplines (financial, human resources, capital planning and performance improvement) is the business plan. By generating a business plan, the water establishments can measure throughout the year their progress in financial self-sustainability, human capacity to meet its requirements, and the performance criteria metrics for reporting to the MOEW and other stakeholders. The primary tool in showing progress against the business plan is an integrated information software system or enterprise resource planning system. The contract detailing component three, in addition to the anticipated results, lists several deliverables enumerated in the footnote below.⁵

With respect to establishing and updating a business plan, LWWSS has assisted the BMLWE in its business plan update as part of the year two work plan, and GIZ is assisting the BWE in establishing its business plan. However, LWWSS and GIZ are employing the same expert to provide this support, demonstrating the strong linkage and donor coordination. . This is also important to ensure that there is consistency in the business plan concepts, training, and execution not only of the business plan but of its implementation.

4. Component Four: Increased Capacity in Financial Planning and Project Management

Increased capacity in capital investment planning requires not only some training in capital planning, but also the ability to ensure that the budgeting and procurement divisions in the WE function closely together. Additionally, the organization will need to improve and expand its capacity to oversee capital projects. The first part of this component (capital planning) is addressed by LWWSS through business planning development and updating. The business plan looks at the next five years, and beyond with respect to capital needs, and assesses the funding needed for capital projects.

With respect to project management, currently, the WE forwards the budget to the MOEW, and the MOEW decides which capital projects it will request from the Council for Development and Reconstruction (CDR) for actual funding and construction. It is the CDR that oversees the development of specifications, tendering, and construction. In the case of donor or international financial institution funding, and particularly with wastewater treatment plants, the plants are operated by the construction contractor for a period of three to five years. Clearly, the WE plays a minor role in the construction or rehabilitation of major capital activities. This institutional

⁵ There are 42 deliverables in the LWWSS contract listed in Section F of the contract. Of these, the following numbered deliverables apply to component three: 11, 12, 13, 14, 15, 16, 1318?, 19, 21, 23, 24, 28, 31, 32, 34, 38, 39, 41, 42. Some deliverables can be listed in more than one component given their nature. For example acquiring new software involves procurement, training and implementation or components 2, 3 and 5. Please see Annex A for the title and list of components.

arrangement is not likely to change in the next three to five years given that there is no political support to move away from the CDR being in charge of major capital projects.

LWWSS has and will continue to strive toward more capital construction responsibility at the WE level for those projects that the WE does carry out. LWWSS has worked with the WE staff in managing relatively small projects (under one million dollars) in terms of planning, funding, and tendering the services for these projects, primarily in the business plan development or updating activities. The emphasis is on the funding planning through the budget, and managing the engineering and construction firms that execute the project. However, this function is carried out by only one or two personnel at each WE. The tendering and project management process is generally under the control of the chief engineer who may or may not have additional engineers to help him or her.

As described throughout the “Project Progress by Water Establishment” section of this Quarterly Report, LWWSS is focusing first on the business planning aspect of capital planning. Funding is the key to move into more WE-sponsored capital construction managed by the WE, and that is the focus of components two, three, five, six and seven. But the institutional hurdle of undertaking major construction projects prevents the WEs and the MOEW from moving into more construction financing and management.⁶

5. Component Five: Provision of Technical Equipment to Improve Water Establishment Performance

From the beginning of the project it has been clear that the WEs had much more need for equipment replacement and new equipment than the LWWSS resources could address. The problem was and continues to be to fashion an affordable set of procurements that balance the WE's priorities with those of USAID. That is, procurements that will increase the amount, volume or quality of the water the WEs provide to those most in need. Fortunately, these two objectives mesh well, and the impacts of the procurements chosen reach the maximum of poor, un-served, or the maximum number of water consumers feasible.⁷

Other major procurements that are listed throughout this Quarterly Report address essential water management needs such as metering water production, which is the first step in any program to reduce water loss. Other procurements such as the detailed survey of the pump stations in the SLWE are essential for service provision planning, capital planning, and system maintenance and operation.

Another aspect of the procurement program is to complete projects that were started but not completed by USAID or other donors. One such project is the installation of the UNICEF procured chlorination systems for BWE. UNICEF had procured 29 chlorination systems but installed only nine of them. The rest lay in the major pump station in Zahle. LWWSS evaluated the remaining 20 systems and determined that they could be installed with the addition of safety

⁶ There are 42 deliverables in the LWWSS contract listed in Section F of the contract. Of these, the following numbered deliverables apply to component four: 16, 21, 23, 24, 25, 26, 27, 29, 33, 38. Some deliverables can be listed in more than one component given the nature. For example acquiring new software involves procurement, training and implementation or components 2, 3, and 5. Please see Annex A for the title and list of components.

⁷ For a complete list of procurements, please refer to the annual procurement plan.

equipment (alarm systems, gas masks, and emergency showers). More detail is presented on this specific project in the BWE section below.

One challenge of the equipment procurement component is that the WEs rarely have performed feasibility and engineering reviews for necessary equipment rehabilitation or replacement projects. LWWSS has found that it is often not prudent to simply replace a pump and motor; rather, LWWSS must assess the entire pump station to consider all needs. For example, pump stations often need to be refurbished with new electrical controls, back-up electrical generation, or systems that can shut down properly when power is lost or electricity voltage is erratic. While the lack of feasibility studies (proper technology for the location and function), and development of specifications are not unexpected tasks, the lack of data and information notably adds to the time required on most procurements.

6. Component Six: Implementation of Small- and Medium-Scale Projects to Improve Operations and Services

As noted previously, USAID has provided DAI with additional funding to undertake infrastructure projects in the BWE, NLWE, and SLWE. The modification also adds 19 months to the LWWSS program, extending the end date from September 30, 2013 to April 30, 2015, and adds \$14,852,153 (full contract now \$34,360,315).

With the NLWE the infrastructure work will connect approximately 8,000 households to the existing system originally installed by CDR about eight years ago. Each newly connected household will also receive a water consumption meter. This activity meets the LWWSS objective of increasing the coverage of the WE as well as providing the basis of reducing the non-revenue water. Metering both the source and consumption are a part of the overall process of reducing water losses by identifying parts of the metered system that are consuming more than the expected average.

With the BWE the infrastructure work will replace old water lines serving five subdivisions of Zahle, and improve the service for approximately 8,500 people. The water supply line replacement project will also reduce water loss. The water supply line replacement, coupled with corresponding reductions in the costs of well and system pumping, and water treatment, will improve the financial capacity of the WE.

With the SLWE the infrastructure work will rehabilitate major pump stations. The impact of this rehabilitation project will be to increase the water volume and reliability of service to approximately 80,000 people. This option, as opposed to selecting several single source wells, was chosen as the highest priority by the director general of the SLWE. The initial assessment of each of the five pump stations will provide an approximate cost for each and determine how many of the five LWWSS resources can improve.

During this reporting period, LWWSS completed additional office space selection and leasing and coordinating with other subcontractors in staffing and planning local engineering support. Such an increase in funding of the project is a welcome improvement to the overall LWWSS objectives because it funds critical infrastructure while at the same time building on the basic project technical assistance foundation.

7. Component Seven: Improved Customer Service and Customer Relations

The customer service orientation of the WEs is in its seminal state. Often the customer is treated as though he or she should be happy to receive water at all. Donors, primarily USAID and GIZ, have begun to provide technical assistance and training to increase the capacity of utility customer relations staff to respond to customer inquiries and requests for service. In fact, the training of the utility staff starts before the actual contact with the customer, by training customer awareness and handling techniques, and procedures for a positive outcome.

In the NLWE, GIZ has provided some assistance in restructuring the organization to improve customer relations, and provided funding for the refurbishment of a customer service center. In SLWE and BMLWE the water establishments have developed their own limited effort to establish and improve customer relations. However, all WEs lack a comprehensive and on-going effort to improve communications and their relationship with customers.

The enterprise resource planning (ERP) software system entails a customer relations management module that helps modernize the customer relations management system. The ERP enables a customer service representative to have nearly all the information needed to respond to most inquiries by the customer. Requests for service are forwarded to the proper division for service response (also, emergency response for line breaks). The ERP is a fundamental change agent within both the BMLWE and BWE in terms of information processing and decision-making. It empowers lower level managers to make decisions quickly to address specific situations (to the extent that top management is willing to delegate the decision-making process).

The customer relations management improvement process entails more than new computer software, it entails a change in the mind-set of the utility employee toward the customer. This attitude is important not only for improved tariff collection, but also for confidence in and cooperation with the water utility. LWWSS staff are involved with these significant steps (ERP development and implementation, customer relations improvement, and customer outreach with respect to water conservation).⁸

E. PROJECT PROGRESS BY WATER ESTABLISHMENT

1. Bekaa Valley Water Establishment (BWE)

Component 2: Capacity Building for Managerial, Technical and Operational Efficiency

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
2.2	Building the WEs' Water Quality Management Capacity			

⁸ There are 42 deliverables in the LWWSS contract listed in Section F of the contract. Of these, the following numbered deliverables apply to component seven: 39, 40, 41. Please see Annex A for the title and list of components.

2.2.1	Conduct water quality baseline survey based on seasonal sampling of all sources, with on-the-job staff training	AUB	Activity Completed Assessment issued to BWE	May, 2012
2.2.2	Establish a region-specific and Libnor-compatible testing protocols and methodology	AUB	Activity Completed Assessment issued to BWE	Sept, 2012
2.2.3	Plan and conduct a comprehensive user training on all aspects of lab operation	AUB	Activity planned	Sept, 2012
2.3	Build Pump Stations Operators Capacity in Operation and Maintenance			
2.3.1	Pump station operators basic O&M and H&S training (70+ staff)	CDM (BG, GT), LWWSS (MK) Kredo	- Activity completed in Year Two. - Will be repeated in BWE to cover new staff.	Sept, 2012

Activity 2.2 - Building the WEs' Water Quality Management Capacity

The water quality assessment and management plan activity with the American University of Beirut (AUB) is on-track. AUB is still in conducting the water quality baseline survey - one for the dry season and one for the wet season.

AUB will then develop a comprehensive water quality testing program, review current laboratory operations, and recommend procedures and equipment not already procured. The last step is the development and provision of a training program for BWE laboratory personnel.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Water quality baseline survey completed	25%											
Establish testing protocols and methodology					0%							
Plan and conduct a comprehensive user training on lab operation					0%							

Activity 2.3 – Building Operators' Capacity in Operation and Maintenance of Pump Station Equipment

Follow Up Pump Station Operators Training

During year two, LWWSS successfully completed the Pump Station O&M training for 20 staff at BWE. This training resulted in improved skills and processes for pump station staff in operating and maintaining pump station plant and equipment, as well as improved health and safety practices.

During year three, LWWSS will plan and conduct a follow-on refresher course for pump station operators trained in year two and a course new for those newly appointed operators who joined BWE during the last months of 2011. The training needs assessment and course preparation will begin in June.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Staff interviews, training needs assessment										0%		
Course preparation										0%		
Provide course										0%		

Component 3: Increase Financial and Commercial Viability of Water Establishments

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
3.1	Upgrade Finance and Accounting Standards and Methods			
3.1.1	Build the WE capacity in consolidating and issuing end of year financial reports	EMC (MC), LWWSS (AS) ABA	Information collected Reports produced	March, 2012
3.1.2	Training in Public Accounting, Finance, Procurement, Auditing	EMC (MC)*, LWWSS (MK)	Training completed Follow-up in place	Feb, 2012
3.1.3	Define cost centers, create/update chart of accounts, and accounting coding procedures	EMC (MC), LWWSS (AS) ABA	Information collected New COAs and procedures defined	March, 2012
3.1.4	Develop procedures for asset and inventory identification, coding and valuation	EMC (MC), LWWSS (AS) ABA	Procedures defined with the WE	March, 2012
3.2	Integrate the WEs Financial, Accounting, Customer Service and Business Process Systems			
3.2.2	Implement software platform including Finance and Accounting System and Customer Relationship Management solution	EMC (MC, NA), LWWSS (AS), ABA EDM	Implementation completed and approved	Aug, 2012
3.2.3	Implement intranet system enabling web-browser based e-training, communication and business process tools	EMC (MC, NA), LWWSS (AS), ABA EDM	Implementation completed and approved	Aug, 2012
3.2.4	Conduct training, assist in transition phase and provide one/two year on site support	EMC (MC, NA), LWWSS (AS), ABA EDM	Training started	Sept, 2012

3.2.5	Supply and install time attendance machine and implement administrative and HR measures to increase HR efficiency	EMC (MC, NA), LWWSS (AS) EDM	- Core equipment installed with training in Year Two. - Two sets of equipment planned for Year Three.	Sept, 2012
3.3	Pilot Stakeholder Exercise to Sustain O&M of USAID WWTP	- DAI (SC, BJ)	- Assessment report	September, 2012

Activity 3.1 - Upgrading Finance and Accounting Standards and Methods

Financial Management Training

Six BWE financial department employees, management, and staff received accounting, budgeting and reporting training from LWWSS financial specialist, Mike Chalah, in October and November. This training forms the basis for the future implementation of the ERP software (see activity 3.2) that introduces accrual accounting.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Build the WE capacity in consolidating and issuing end of year financial reports				50%								
Training in Public Accounting, Finance, Procurement, Auditing				100%								
Define cost centers, create/update chart of accounts, and accounting coding procedures				60%								
Develop procedures for asset and inventory identification, coding and valuation				60%								

Activity 3.2 - Integrating the WE's Financial, Accounting, Customer Service and Business Process Systems

Enterprise Resource Planning System Progress

The contract to procure and implement the software and licenses for the Microsoft system began on November 1, 2011 and EDM was the successful bidder. LWWSS established the ERP implementation teams in November, and officially kicked-off the project with the WE teams and chairmen.

A detailed project work schedule was developed with oversight by the LWWSS specialists and initial implementation stages were started with a view to meet the targets for implementation on site by Q3 2012.

BWE was found to be facing challenges in appointing a senior IT specialist to represent the WE throughout the stages, and champion the operation of the ERP solution past implementation. DAI will be proposing an action plan for BWE management to train and build the capacity of

existing staff, as well as accelerate the permanent hiring of senior IT personnel to undertake these tasks in-house.

The CRM module was worked on along with the financial transaction module and is anticipated to be implemented at the same time as the other module. Prior to the end of this quarter the CRM specialist, Nada Akl, had been successful in obtaining agreement in changing the format of customer business process forms and to ensure their inclusion in the overall CRM module.

Time Attendance Machine Installation in Branch Offices

As part of Activity 3.2.5, LWWSS already provided two Time Attendance Machines in the BWE headquarters, and plans to install similar machines in the Zahle branch and the Baalbeck branch in Q3 and Q4 of year three, as this installation is critical to modernizing the human resource and financial operations in the WE.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Implement software platform including FAS and CRM solutions	15%											
Implement intranet system enabling web-browser based e-training							0%					
Conduct training, assist in transition phase and provide one/two year on site support							0%					
Supply and install time attendance machine and implement administrative and HR measures to increase HR efficiency							50% (100% completed in H/O 0% completed in branches)					

Activity 3.3 – Developing Pilot Stakeholder Exercise to Sustain O&M of USAID Wastewater Treatment Plants

LWWSS is involved in an activity that will contribute to advancing the development of clearer policies relative to the responsibility and sustainability of wastewater collection and treatment services. This activity revolves around the existing USAID wastewater treatment plants in the Bekaa. Its objective is to propose mechanisms of establishing service agreements between the WE and those municipalities that own, operate and maintain the wastewater collector network or plant within their jurisdictions. As of the end of December, the draft assessment report is in progress, with a view to issue it in February.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Draft assessment report	50%											
Discuss, amend and issue to USAID							0%					

Component 4: Capital Investment Planning and Program/Project Management

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
4.4	Master planning			
4.4.1	Water Supply and Sewerage Master plan	Local subcontractor (TBC) Valuadd	Activity SOW defined. Services procured Planning started	Sept, 2012

Activity 4.4 - Developing Water Supply and Sewerage Master plan

ValuAdd, LWWSS' subcontractor, will begin drafting an Expression of Interest (EOI) in Q2 of year three for the Master Planning activity and then LWWSS will launch the advertisements.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Draft and issue EOI for master planning subcontractor					0%							
Evaluate RFPs and develop RFP shortlist							0%					
Issue RFP, receive and evaluate bids								0%				
Appoint master planning subcontractor											0%	

Component 5: Procurement of Technical Equipment to Strengthen WEs

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
5.4	Upgrading the Water Analysis Laboratories			
5.4.1	Upgrade the water testing laboratories with infrastructure and equipment	AUB Local suppliers	Laboratory procurement scheme planned and agreed with BWE	Sept, 2012
5.4.2	Establish service agreements, and conduct user training programs for the above activities	AUB LWWSS (MK)*	Activity planned	Sept, 2012
5.5	Water Treatment and O&M Training			
5.5.1	Install up to 20 UNICEF-supplied chlorinator units; Supply and install safety equipment and gas detection systems	CDM (BG, GT, EH) Sanabel	Installation complete	Completed
5.5.2	Training course for operators and year-long service and supply of consumables	CDM (BG, GT, EH), LWWSS (MK) Sanabel	Training conducted (done) 1 year service agreement, consumables	Sept, 2012
5.6	Increase IT Infrastructure Efficiency			
5.6.1	Assess and design IT infrastructure for WE headquarters and connectivity to branches	LWWSS (AS)	Report issued and adopted by SLWE	Completed
5.6.2	Upgrade server installation and power supply infrastructure at head office and selected branches	LWWSS (AS) Local subcontractor (MDS + TBD)	Scope defined Procurement and implementation started	Sept, 2012
5.8	Establishing Direct Customer Interface			
5.8.1	Design branch office and customer service center in WE's premises in Zahle	EMC (NA)*, LWWSS (AS) Boudy Esta Architects	Design complete and approved by WE	Completed
5.8.2	Implement interior works and furnish the new customer service center; connect IT systems to head office	Boudy Esta Architects, LWWSS, EMC Al Handassa Constructors	Implementation complete Project handed over to WE	May, 2012
5.8.3	Assist WE in reaching customers and building staff capacity in customer service	EMC (NA) Local subcontractor (TBD)	Activity planned	Sept, 2012

Activity 5.4 – Upgrading Water Analysis Laboratories

LWWSS upgraded BWE's laboratories throughout year 2 and trained laboratory staff on the use of the new equipment.

However, as part of AUB's water quality assessment and management plan (see activity 2.2), LWSSS will further upgrade the laboratories in Q3 and Q4 of year 3, as indicated in the Gantt chart below.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Based on water quality mapping, investigate and plan laboratory equipment needs									0%			
Start procurement											0%	
Establish service agreements, and conduct user training programs for the above activities											0%	

Activity 5.5 – Water Treatment and O&M Training

UNICEF Chlorination Systems Installation

In the previous quarter, the subcontractor Sanabel completed the installation of 17 chlorination systems in 14 pumping stations. During this quarter, Sanabel installed safety precaution equipment that USAID through LWSSS. The equipment installed was emergency showers for each of the 14 stations where the chlorination systems were installed. It should be noted that the contract with Sanabel also entails supply of chlorine gas and periodic on-site training for WE staff until November, 2012.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Ongoing training and follow-up with operators			10%									
Provide consumables			10%									

Activity 5.6 - Increasing IT Infrastructure Efficiency

IT equipment was ordered in October 2011 and will be delivered to the BWE in January 2012. Once the equipment is delivered, Ahmad Siddik, LWSSS' Systems and Services Manager, will install the equipment in time for the ERP implementation in May.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Complete procurement of IT equipment required	100%											
Equipment delivery on site					0%							
Install and launch equipment, ahead of programming the ERP platform						0%						

Activity 5.8 – Establishing Direct Customer Contact

Customer Service Center Progress

The rehabilitation work on the Zahle customer service center is on schedule and within budget. The rehabilitation work is anticipated to be completed in May, 2012.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Commence interior works associated with the branch	30%											
Commence procurement of furniture and other associated packages			0%									
Finalize and handover branch to WE ahead of launching								0%				
Provide specialist customer service training to staff										0%		

Component 6: Small to Medium Scale Rehabilitation/Upgrade/Extension Water and Wastewater Works within WEs

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
6.1	Decreasing Water Losses and Upgrading Existing Networks			
6.1.1	Design network upgrades in Zahle: rehabilitating the water supply network of the region of Mar Elias	LWWSS (Infrastructure PM) Local Engineering	Engineering consultant appointed Design complete	Sept, 2012

		Firm (TBD)		
6.1.2	Implement network upgrades in Zahle: rehabilitating the water supply network of the region of Mar Elias	Local Engineering Firm (TBD) Local subcontractor (TBD)	Preparation for procurement started	Sept, 2012
6.1.3	Design network upgrades in Zahle: rehabilitating five branch networks in Haouche el Oumara, Maalaka, Rassieh, Karak-Forzol and Midan	LWWSS (Infrastructure PM) Local Engineering Firm (TBD)	Engineering consultant appointed Design complete	Sept, 2012
6.1.4	Implement network upgrades in Zahle: rehabilitating five branch networks in Haouche el Oumara, Maalaka, Rassieh, Karak-Forzol and Midan	Local Engineering Firm (TBD) Local subcontractor (TBD)	Preparation for procurement started	Sept, 2012

Activity 6.1 - Decreasing Water Losses and Upgrading Existing Networks

The activities under Component 6 fall under the infrastructure portion of LWWSS, which began on October 1, 2011. The infrastructure portion of LWWSS' project entails the following:

- Mobilization: acquisition of new office space (in our current building) and refurbishment, furniture and equipment procurement, and recruitment for approved additional positions.
- Engineering consulting firms hired, inspection, data gathering, preliminary design and DAI, stakeholder, and USAID approval
- Final design approval, advertisement and selection of construction companies
- Subcontract approval of selected construction companies by DAI and USAID
- Construction of project
- Commissioning

The two activities under Component 6 are expanding service provision to non-served areas in Beit Mellat, Akkar for NLWE and rehabilitating branch networks in Zahle for BWE. The launching of these activities has been delayed, mostly due to recruitment of personnel, as the most critical position under Component 6 is the Infrastructure Project Manager and a candidate has not yet been identified. When this position is filled and the candidate begins, activities under Component 6 will commence.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Hiring of project personnel and conducting detailed technical investigation of project parameters.	25%											
Drafting engineering SOW, launching procurement and appointing engineering subcontractor.					0%							
Starting the design and the preparation of the procurement of the works.										0%		

Component 7: Corporate Culture, Customer Service Orientation, and Public Outreach

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
7.2	Customer Service Management Capacity Building			
7.2.1	Customer service training aiming at enhancing service effectiveness and increasing customer satisfaction	EMC (NA) LWWSS (MK)	Training provided Follow-up in place	March, 2012
7.3	Develop Tools and Support WEs in Adopting Corporate Communication	EMC (NA) Local subcontractor (TBD)	Activity completed	March, 2012
7.3.3	Develop and Adopt Customer Service Application Forms	- EMC (NA) - Local subcontractor (TBD)	- Activity completed	March, 2012

Activity 7.2 - Customer Service Management Capacity Building

Customer Service Training

A customer service training for the BWE will be provided by LWWSS specialist Nada Akl in Q2 of year three, indicated in the Gantt chart below. The essence of the customer service training is to prepare the WE staff members to employ contemporary customer service practices as a means of improving WE staff effectiveness and as a means of building a positive relationship between the WE and its customers.

Activity 7.3 - Develop tools and Support WEs in Adopting Corporate Communication

Customer Service Application Forms

The Customer Service Application forms are in progress and will be launched in a pilot format in Q2 of year three. Feedback will then be received and full-scale printing and use by WE staff members will follow.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Course preparation for customer service training			50%									
Customer service training course provision.				0%								
Finalize design, obtain WE approval and deploy forms as pilot in branches.			40%									
Obtain final feedback and issue formally, then arrange for printing.						0%						

2. Beirut-Mount Lebanon Water Establishment (BMLWE)

Component 2: Capacity Building for Managerial, Technical and Operational Efficiency

N/A

Component 3: Increase Financial and Commercial Viability of Water Establishments

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
3.1	Upgrade Finance and Accounting Standards and Methods			
3.1.1	Build the WE capacity in consolidating and issuing end of year financial reports	EMC (MC), LWWSS (AS) ABA	Information collected Reports produced	March, 2012
3.1.3	Define cost centers, create/update chart of accounts, and accounting coding procedures	EMC (MC), LWWSS (AS) ABA	Information collected New COAs and procedures defined	March, 2012
3.1.4	Develop procedures for asset and inventory identification, coding and valuation	EMC (MC), LWWSS (AS) ABA	Procedures defined with the WE	March, 2012
3.2	Integrate the WEs Financial, Accounting, Customer Service and Business Process Systems			
3.2.2	Implement software platform including Finance and Accounting System and Customer Relationship Management solution	EMC (MC, NA), LWWSS (AS), ABA EDM	Implementation completed and approved	Aug, 2012
3.2.3	Implement intranet system enabling web-browser based e-training, communication and business process tools	EMC (MC, NA), LWWSS (AS), ABA EDM	Implementation completed and approved	Aug, 2012
3.2.4	Conduct training, assist in transition phase and provide one/two year on site support	EMC (MC, NA), LWWSS (AS), ABA EDM	Training started	Sept, 2012

Activity 3.1 - Upgrading Finance and Accounting Standards and Methods

These activities are on-going, implemented by LWWSS' Financial Specialist, Mike Chalah, as these activities are a pre-requisite for the implementation of the ERP solution (see activity 3.2) to enhance the staff's skills in conducting public and commercial accounting.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Build the WE capacity in consolidating and issuing end of year financial reports	50%											
Training in Public Accounting, Finance, Procurement, Auditing	100%											
Define cost centers, create/update chart of accounts, and accounting coding procedures	80%											
Develop procedures for asset and inventory identification, coding and valuation	60%											

Activity 3.2 - Integrating the WE's Financial, Accounting, Customer Service and Business Process Systems

Enterprise Resource Planning System Progress

The contract to procure and implement the software and licenses for the Microsoft system began on November 1, 2011 and EDM was the successful bidder. LWWSS established the ERP implementation teams in November, and officially kicked-off the project with the WE teams and chairmen.

A detailed project work schedule was developed with oversight by the LWWSS specialists and initial implementation stages were started with a view to meet the targets for implementation on site by Q3 2012, at which point the FAS module will go live. The billing and collection module will be launched in August 2012. The CRM module was worked on along with the financial transaction module and is anticipated to be implemented in Q4 of year three.

In parallel, BMLWE's teams are proceeding with the procurement of IT equipment to host the forthcoming software platform. BMLWE has faced delay in this procurement and is committed to mitigating it and accelerating installation in time for software migration to the new hardware.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Implement software platform including FAS and CRM solutions	15%											
Implement intranet system enabling web-browser based e-training							0%					
Conduct training, assist in transition phase and provide one/two year on site support							0%					
Provide training to senior IT personnel at WE							0%					

Component 4: Capital Investment Planning and Program/Project Management

N/A

Component 5: Procurement of Technical Equipment to Strengthen WEs

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
5.2	Upgrading Pumping and Energy Efficiency			
5.2.1	Jeita Pump Station: Design equipment replacement and sand removal unit solution	CDM (BG, GT, EH)	Design Produced and Approved by BMLWE	Completed
5.2.2	Jeita Pump Station: Supply 18 pumps and motors (US made), associated valves, fittings and electrical panel boards	CDM (BG, GT, EH) NPC and other US manufacturers	Equipment delivered to BMLWE	June, 2012
5.2.7	Establish service agreements, and conduct user training programs for the above activities	- CDM (BG, GT, EH), DAI (MK) - Local subcontractor (TBD)	- Activity planned	September, 2012

Activity 5.2 - Upgrading Pumping and Energy Efficiency

Jeita Pump Station Equipment Replacement

The initial identification and agreement for the Jeita pump station upgrade took place during the HPIP development. However, after that, since there was absolutely no engineering analysis done on the pump station upgrade, LWWSS conducted the feasibility analysis, pre-design studies, design, and then sought BMLWE approval. This was done during year one of the project. During year-two, after completing the pre-design, LWWSS began a full pump station design. The design also included the sand removal from the water prior to the water entering the pump wet well. The design of the sand removal unit took several months to develop since the space for the pump station was constrained, and additional space acquisition was not possible. This determination was made by BMLWE and LWWSS during year two prior to the end of September, 2011.

Based on the engineering and manufacturing aspects of the Jeita Pump station rehabilitation the procurement was broken down into three bids. The pumps and motors are usually procured from one source, while motor control centers are a specialty area and not generally provided by the pump and motor manufacturers. Finally flanges, fittings, couplings and valves, because of the high pressures involved (900 pounds per square inch) would be manufactured by yet another specialty manufacturer. Consent to subcontract for the motors, pumps and motor control centers was granted in October, 2011 and the orders placed. The manufacturing and shipping is anticipated to take 26 weeks, which would have the pumps and motors arriving in Lebanon in May, 2012.

Consent by the CO's office was not granted for the procurement of the fittings, flanges, couplings and valves because LWWSS did not advertise for the bids.⁹ LWWSS was instructed by the CO to advertise. In the meantime, LWWSS became aware that there might be local suppliers in Lebanon that could provide the high pressure fittings, valves, couplings and have the flanges match up with the US-made pumps and motors. LWWSS proceeded to advertise in the local (Lebanon) print media for potential suppliers. The outcome of this process is anticipated in Q2 of year three.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Complete procurement and place orders on pumps and motors.	100%											
Manufacturing and delivery of pumps (ahead of installation by BMLWE)				10%								
Procurement, manufacturing and delivery of valves (ahead of installation by BMLWE)				0%								
Procurement, manufacturing and delivery of electrical panels (ahead of installation by BMLWE)				0%								
Procurement, manufacturing and delivery of fittings (ahead of installation by BMLWE)						0%						

Component 6: Small to Medium Scale Rehabilitation/Upgrade/Extension Water and Wastewater Works within WEs

N/A

Component 7: Corporate Culture, Customer Service Orientation, and Public Outreach

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
7.2	Customer Service Management Capacity Building			
7.2.1	Customer service training aiming at enhancing service effectiveness and increasing customer satisfaction	EMC (NA) LWWSS (MK)	Training provided Follow-up in place	July, 2012

⁹ DAI used CDM to find manufacturers of such specialty items as a substitute for advertising, which is a well establish industry practice for such special items. However, this approach was not approved by the CO and LWWSS was directed to advertise.

7.2 - Customer Service Management Capacity Building

As reported above in component three, CRM is a part of the total ERP system upgrade and the LWWSS CRM specialist has participated in the development of the specifications, tendering, and selection process. The CRM specialist will continue to play a critical role in the ERP implementation process.

In Q4 of year three, 20 BMLWE staff will receive training in customer complaint handling and in managing the customer relation process to improve overall customer relations. LWWSS Communications and Outreach Specialist Nada Akl is in the process of planning this training.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Course preparation for customer service training					0%							
Customer service training course provision.									0%			

3. North Lebanon Water Establishment (NLWE)

Component 2: Capacity Building for Managerial, Technical and Operational Efficiency

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
2.3	Build Pump Stations Operators Capacity in Operation and Maintenance			
2.3.2	Pump station operators advanced training in O&M	- DAI (MK) - Kreda	- Activity completed - Follow-on in place	Sept, 2012

Activity 2.3 – Building Operators’ Capacity in Operation and Maintenance of Pump Station Equipment

Pump Station Operations and Maintenance Trainings

Throughout Q4 of year two, LWWSS trained 51 pump station operators in two locations (Tripoli and Halba) within the WE. Operators and supervisors are more able to properly operate and maintain the pump stations based on increased knowledge and skills in pump operation and safety; motor operation control and safety; and electrical control panel operation and safety. Part of the pump station training included troubleshooting or early diagnosis of impending pump or motor failure. In addition, operators were given formatted operating logs to keep daily records in each station. A check on the operators after the training showed that the operators were keeping the logs up to date, an important part of pump and motor maintenance and repair.

An award ceremony for these trainings took place during this quarter, which is detailed in the quarterly highlight above.

Advanced Pump Station Operators Training

Because the basic pump station O&M training that took place in year two (discussed above) was successful and resulted in a recommendation by both trainees and NLWE management for LWWSS to pursue a more advanced training.

The follow-on training will be based on the training needs assessment conducted by LWWSS in March and April, and by the training results and post-training assessments. After these assessments, LWWSS' subcontractor Kreda will begin planning an advanced pump station operators training that are planned to start in May.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Staff interviews, training needs assessment						0%						
Course preparation							0%					
Provide course								0%				

Component 3: Increase Financial and Commercial Viability of Water Establishments

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
3.1	Upgrade Finance and Accounting Standards and Methods			
3.1.2	Training in Public Accounting, Finance, Procurement, Auditing	EMC (MC)*, LWWSS (MK)	Training completed Follow-up in place	Sept, 2012
3.1.3	Define cost centers, create/update chart of accounts, and accounting coding procedures	EMC (MC), LWWSS (AS) ABA	Information collected New COAs and procedures defined	Sept, 2012
3.1.4	Develop procedures for asset and inventory identification, coding and valuation	EMC (MC), LWWSS (AS) ABA	Procedures defined with the WE	Sept, 2012

Activity 3.1 - Upgrading Finance and Accounting Standards and Methods

Mike Chalah, LWWSS Financial Specialist, will work with NLWE staff to define the process needed to establish a new analytical accounting system, but this will not start until Q3 of year three, as detailed in the Gantt chart below.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Training in Public Accounting, Finance, Procurement, Auditing												
Define cost centers, create/update chart of accounts, and accounting coding procedures												
Develop procedures for asset and inventory identification, coding and valuation												

Component 4: Capital Investment Planning and Program/Project Management

N/A

Component 5: Procurement of Technical Equipment to Strengthen WEs

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
5.2	Upgrading Pumping and Energy Efficiency			
5.2.1	NLWE: Test and design the replacement up to 20 submersible pumps, motors and other works in up to 15 stations	- CDM (BG, GT, EH) - Local subcontractor (TBD)	- Procurement started	Sept, 2012
5.2.2	NLWE: Supply and install the replacement of up to 20 submersible pumps, motors and other works in up to 15 stations	- CDM (BG, GT, EH) - Local subcontractor (TBD)	- Activity planned	Sept, 2012
5.2.7	Establish service agreements, and conduct user training programs for the above activities	- CDM (BG, GT, EH), DAI (MK) - Local subcontractor (TBD)	- Activity planned	Sept, 2012
5.3	Increasing Supply Hours to Areas Facing Supply Shortage			
5.3.1	Supply and install up to 9 back-up generators for key NLWE stations	CDM (BG, GT, EH) Local subcontractor (TBD)	Procurement complete Manufacturing complete	Sept, 2012
5.3.2	Establish service agreements and conduct user training program for these generators	CDM (BG, GT, EH), LWWSS (MK) Local subcontractor (TBD)	Activity planned	Sept, 2012

Activity 5.2 - Upgrading Pumping and Energy Efficiency

Rehabilitation of Pump Stations

LWWSS subcontractor CDM is still investigating the pump stations and wells, where pumps are to be replaced. CDM's teams are facing increasing issues with the inconsistency of data

provided by NLWE for these wells. To resolve this issue, CDM is conducting detailed site visits and attempting to compare site findings with NLWE data. Upon completion of this survey, DAI will bring up these inconsistencies with NLWE management and agree with them the way forward.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Complete assessment and design for pumps.	50%											
Confirm costing and start testing ahead of procurement.						0%						
Start procurement process for manufacturing and installation.											0%	

Activity 5.3 - Increasing Supply Hours to Areas Facing Supply Shortage

Back-up generators for key stations

Assessment and design for generators is underway as of the end of December. The bids are due to be released by early in Q2, to enable pricing and procurement to be completed by March/April, 2012.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Complete assessment and design for generators.	75%											
Confirm costing and start procurement process.				0%								
Place procurement orders for manufacturing and installation.								0%				

Component 6: Small to Medium Scale Rehabilitation/Upgrade/Extension Water and Wastewater Works within WEs

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
6.2	Expanding Service Provision to Non-Served Areas			
6.2.1	Beit Mellat, Akkar, North Lebanon: Design metered house connections to up to 18 villages	LWWSS (Infrastructure PM) Local Engineering Firm (TBD)	Scope defined, consultant appointed Engineering services started.	Sept, 2012

6.2.2	Beit Mellat, Akkar, North Lebanon: Implement house connections to up to 18 villages	Local Engineering Firm (TBD) Local subcontractor (TBD)	Preparation for procurement started	Sept, 2012
6.2.3	Beit Mellat, Akkar, North Lebanon: Build WE capacity in increasing customer base and implementing consumer metering	Local Engineering Firm (TBD) LWWSS (infrastructure PM)	Activity planned	Sept, 2012

Activity 6.1 - Decreasing Water Losses and Upgrading Existing Networks

The activities under Component 6 fall under the infrastructure portion of LWWSS, which began on October 1, 2011. The infrastructure portion of LWWSS' project entails the following:

- Mobilization: acquisition of new office space (in our current building) and refurbishment, furniture and equipment procurement, and recruitment for approved additional positions.
- Engineering consulting firms hired, inspection, data gathering, preliminary design and DAI, stakeholder, and USAID approval
- Final design approval, advertisement and selection of construction companies
- Subcontract approval of selected construction companies by DAI and USAID
- Construction of project
- Commissioning

The two activities under Component 6 are expanding service provision to non-served areas in Beit Mellat, Akkar for NLWE and rehabilitating branch networks in Zahle for BWE. The launching of these activities has been delayed, mostly due to recruitment of personnel, as the most critical position under Component 6 is the Infrastructure Project Manager and a candidate has not yet been identified. When this position is filled and the candidate begins, activities under Component 6 will commence.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Hiring of project personnel and conducting detailed technical investigation of project parameters.	25%											
Drafting engineering SOW, launching procurement and appointing engineering subcontractor.								0%				
Starting the design and the preparation of the procurement of the works.												0%

Component 7: Corporate Culture, Customer Service Orientation, and Public Outreach

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
7.3	Develop Tools and Support WEs in Adopting Corporate Communication			

7.3.2	Design and Implement WE Corporate Website	EMC (NA), Local subcontractor (TBD)	Activity completed	Sept, 2012
7.6	Consumer-Targeted Awareness Programs: World Water Day, Water Quality, Conservation			
7.6.2	Water awareness campaigns on 2012 World Water Day	EMC (NA) Local subcontractor (TBD)	Activity completed	April, 2012

Activity 7.3 –Designing and Implementing WE Corporate Website

Brand Identity Guidelines

Early in October, the English version of the Brand Identity Guidelines was sent to the NLWE Director and official approval was obtained in late October. We also received approval to translate the Brand Identity Guidelines into French and Arabic, and received these translations in December. We sent the French and Arabic versions to the NLWE in December and we are still awaiting official approval.

Corporate Website

This activity will not begin until the Brand Identity Guidelines (see activity 7.3.1) are finalized and approved.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Obtain approval on corporate guidelines, thereby enabling website design to start.				0%								
Appoint web design subcontractor and start design and implementation process.						0%						

Activity 7.6 - Implementing Consumer-Targeted Awareness Programs: World Water Day, Water Quality, Conservation

To complement its year-three activities in NLWE, and to support the WE in its effort to reach customers, build its corporate identity and promote water conservation, LWWSS will implement an outreach campaign on World Water Day in March, 2012.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Identify target audience, prepare awareness material and brief all stakeholders.				0%								
Conduct interactive activity, record impacts and report to USAID.						0%						

4. South Lebanon Water Establishment (SLWE)

Component 2: Capacity Building for Managerial, Technical and Operational Efficiency

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
2.2	Establishing and Building the Capacity of Metering Teams			
2.2.1	Assist in identifying metering teams and assess training needs	- CDM (BG, GT, EH) - DAI (MK) - ValuAdd	- Assessment conducted, recommendations issued to WE	Sep, 2012
2.2.2	Provide management team and field team training on metering	- CDM (BG, GT, EH) - DAI (MK)	- Training planned - Scope of Work defined	Sep, 2012
2.2.3	Provide technical assistance (studies, training, study tours) and/or technological tools for water demand management	- DAI (TBD) - ValuAdd	- Activity planned	Sep, 2012
2.2	Building the WEs' Water Quality Management Capacity			
2.2.2	Establish a region-specific and Libnor-compatible testing protocols and methodology.	- AUB (BWE) - TBD (SLWE)	- Assessment issued to BWE - Activity started	Sep, 2012

Activity 2.1 – Establishing and Building the Capacity of Metering Teams

This activity accompanies Activity 5.1, relating to the identification of water production in SLWE through the procurement and installation of source metering equipment. This activity will not start until Q3 and will continue in Q4 when the source meters are purchased and the installation is underway.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Assist in identifying metering teams and assess training needs.											0%	
Prepare for the provision management team and field team training on metering.												0%
Prepare for the provision of technical assistance (studies, training, study tours) and/or technological tools for water demand management												0%

Activity 2.2 - Building the WEs' Water Quality Management Capacity

LWWSS is in the process of considering implementing an activity with SLWE to establish testing protocols and methodologies in order to assist the SLWE in meeting the forthcoming national potable water testing standards. The initial assessment visits and discussions will begin in Q2 of year three.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Conduct initial assessment visits and discussions.							0%					
Plan and implement necessary training for increased efficiency in water quality management.							0%					
Start the provision of technical assistance and studies to develop a WE-specific water testing methodology.										0%		

Component 3: Increase Financial and Commercial Viability of Water Establishments

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
3.2	Integrate the WEs Financial, Accounting, Customer Service and Business Process Systems			
3.2.2	Update software platform including Finance and Accounting System and Customer Relationship Management solution	EMC (MC, NA), LWWSS (AS), ABA EDM	Implementation completed and approved	Aug, 2012
3.2.3	Implement intranet system enabling web-browser based e-training, communication and business process tools	EMC (MC, NA), LWWSS (AS), ABA EDM	Implementation completed and approved	Aug, 2012
3.2.4	Conduct training, assist in transition phase and provide one/two year on site support	EMC (MC, NA), LWWSS (AS), ABA EDM	Training started	Sept, 2012

Activity 3.1 - Integrate the WEs Financial, Accounting, Customer Service and Business Process Systems

As per the Workplan, Mr. Chalah (LWWSS' Financial Specialist) and Mr. Ahmad Siddik (LWWSS' Systems and Services Manager) will begin implementing these activities in Q3 and Q4 of year three after the implementation of the ERP in BMLWE and BWE.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Upgrade software platform including FAS and CRM solutions										0%		
Implement intranet system enabling web-browser based e-training						0%						
Conduct training, assist in transition phase and provide one/two year on site support						0%						

Component 4: Capital Investment Planning and Program/Project Management

Item	Description	Program Resource	Deliverable by end of Year Three	Deliverable Timeframe
4.1	Increase Capacity in Business Planning, Capital Investment Planning and Benchmarking			
4.1.1	Capacity building in planning and updating 5-year business plans, benchmarking and performance monitoring	- ValuAdd - EMC (MC)	- Business plan prepared, issued to WE - Follow-up in place	May, 2012
4.2	Implement Asset Survey, Inventory and Valuation			
4.2.1	Pump-station inventory and valuation, in a format that is ready for integration into FAS, MMS and GIS	- CDM (BG), EMC (MC), DAI (AS) - Cadres	- Activity completed	June, 2012
4.2.2	Pump station equipment replacement packages for bidding by BWE	- CDM (BG), EMC (MC), DAI (AS) - Cadres	- Activity completed	June, 2012
4.2.3	O&M training needs assessment for pump-station operators	- CDM (BG), EMC (MC), DAI (AS) - Cadres	- Activity completed	June, 2012

Activity 4.1 - Increase Capacity in Business Planning, Capital Investment Planning and Benchmarking

Five-Year Business Plan Update

During this quarter, LWWSS has assisted the SLWE to substantially amend its business plan to incorporate the recently adopted National Water Sector Strategy (NWSS) elements. During the second quarter the SLWE staff will review the amended version with the director general. The director general will then submit the amended business plan to the SLWE Board of Directors. Upon Board approval, the business plan will be submitted to the MOEW for approval.

The fact that the MOEW is looking at the business plan to report progress toward the NWSS is good news for LWWSS and the WEs, as the WEs annually amend their business plans to show that they are doing their best to meet the NWSS and MOEW goals and objectives. Concurrently, it demonstrates the MOEW acceptance of the business plan as the document that

demonstrates the planning and budgetary commitment to the NWSS. In fact, the business plan does much more than the planning and capital budgeting to meet the NWSS, it also outlines the human resources and performance improvements that will enable the WEs to gradually achieve the NWSS goals and objectives.

Activity 4.2 - Implementing Asset Inventory and Valuation

Detailed Pump Station Survey and Technical Assessment

As of December, LWWSS completed a detailed study of over 80 SLWE pump stations. With 220 pump stations in all, we anticipate continuing this work until May 2012. This activity will feed into the maintenance management software planned for procurement for SLWE in year three.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Final Business Plan Issued					90%							
Pump-station inventory and valuation, in a format that is ready for integration into FAS, MMS and GIS.					35%							
Pump station equipment replacement packages for bidding by SLWE.					35%							
O&M training needs assessment for pump-station operators.					35%							

Component 5: Procurement of Technical Equipment to Strengthen WEs

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
5.1	Identifying Water Production and Contributing to Water Demand Management			
5.1.1	Supply and install up to 218 production meters, fittings and protection box/manhole (all non-metered sources in WE)	- CDM (BG, GT, EH) - Local subcontractor (TBD)	- Orders placed, installation started	Sep, 2012
5.2	Upgrading Pumping and Energy Efficiency			
5.2.3	SLWE: Test and design pumps, motors and associated works for the rehabilitation of selected stations	- CDM (BG, GT, EH) - Local subcontractor (TBD)	- Design Produced and Approved by SLWE	Sep, 2012
5.2.4	SLWE: Supply and install pumps, motors and associated works for the rehabilitation of selected stations	- CDM (BG, GT, EH) - Local subcontractor (TBD)	- Activity planned	Sep, 2012

5.2.7	Establish service agreements, and conduct user training programs for the above activities	- CDM (BG, GT, EH), DAI (MK) - Local subcontractor (TBD)	<input type="checkbox"/>	- Activity planned	Sep, 2012
5.4	Upgrading Water Analysis Laboratories		<input type="checkbox"/>		
5.4.1	Upgrade the water testing laboratories with infrastructure and equipment	- AUB - Local suppliers	<input type="checkbox"/>	- Activity completed	Sep, 2012
5.4.2	Establish service agreements, and conduct user training programs for the above activities	- AUB - DAI (MK)	<input type="checkbox"/>	- Activity planned	Sep, 2012
5.6	Increase IT Infrastructure Efficiency		<input type="checkbox"/>		
5.6.2	Upgrade server installation and power supply infrastructure at head office and selected branches	- DAI (AS) - Local subcontractor (MDS + TBD)	<input type="checkbox"/>	- Scope defined - Procurement and implementation started	Sep, 2012

Activity 5.1 - Identifying Water Production

Source Metering

This project activity has been delayed approximately three months due to the difficulty in getting local bidders to meet US bidding standards, standards that allow CDM and DAI to determine whether the bids can be compared with each other and that the specifications required will be met.

While the delay has not and is not expected to impact DAI's ability to get the project done, LWSS found that some Lebanese vendors and contractors operate much more loosely than is acceptable for our project procurements and infrastructure works. For example, in the first round of bids received, some of the bids did not state the specific equipment that would be provided, thus, making it impossible to tell if the vendor would actually meet the stated specifications. Under this circumstance, it made it impossible for LWSS to accept such bids. A second round of bids did go further in providing information, but it is still necessary for LWSS to ask for more information to determine if the specification would be met. When this information is received, the best scoring bid will be identified for the procurement to proceed.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Complete specifications of equipment. Start procurement of production meters, fittings.	70%											
Place subcontract for supply and installation of up to 218 production meters, fittings and protection boxes.						0%						
Place orders. Start installation on site.								0%				

Activity 5.2 – Upgrading Pumping and Energy Efficiency

Rehabilitation of Pump Stations

There is a delay in starting the work in SLWE based on the request from SLWE Director General to change the scope of work that was originally proposed. To accommodate the demand-driven change, LWWSS was obligated to submit an approval request for the USAID Contracts Office to approve the change in scope. The change in scope is to rehabilitate up to five major pump stations as opposed to the original proposal of providing pumps and motors for up to 40 single-well pump stations.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Investigation project, draft SOW, lunch RFP, obtain bids for local subcontractor to CDM, for design services.	60%											
Conduct evaluation of RFPs, interviews, and appoint engineering subcontractor.						0%						
Start design stage and issue completed design package for SLWE review.								0%				

Activity 5.4 – Upgrading Water Analysis Laboratories

Laboratory Equipment Training

Twenty SLWE laboratory staff (Tyre, Nabatieh, Saida labs) successfully completed training on the use, maintenance and recordation of the mass spectrophotometer, PH meter and temperature meter during this quarter.

The last piece of equipment as part of upgrading SLWE water analysis laboratories is the Atomic Absorption Spectrophotometer. The installation of this equipment has taken longer than expected because it was determined that the electrical supply to the laboratory was intermittent, which is hugely problematic when running water samples. As of the end of Q1, LWWSS engineers are in the process of analyzing the problem and determining the best solution to providing consistent power, especially during testing periods. We anticipate resolution of this problem early in Q2, at which point the installation of the AA will be completed and laboratory personnel will be trained on its use.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Delivery of remaining laboratory equipment packages.	75%											
Installation and complete user training.	75%											
Service agreement and follow-up in place.							10%					

Activity 5.6 – Increasing Information Systems Infrastructure Efficiency

This activity is linked to activity 3.1 - *Integrating the WEs Financial, Accounting, Customer Service and Business Process Systems*. As per the Workplan, Mr. Chalah (LWWSS' Financial Specialist) and Mr. Ahmad Siddik (LWWSS' Systems and Services Manager) will begin implementing these activities in Q3 and Q4 of year three after the implementation of the ERP in BMLWE and BWE.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Finalize specifications, start procurement for server upgrades.					0%							
Upgrade server installation and other key IT infrastructure at head office.									0%			

Component 6: Small to Medium Scale Rehabilitation/Upgrade/Extension Water and Wastewater Works within WEs

N/A

Component 7: Corporate Culture, Customer Service Orientation, and Public Outreach

Item	Activity Description	Program Resource	Deliverable by End of Year Three	Timeframe
7.6	Consumer-Targeted Awareness Programs: World Water Day, Water Quality, Conservation			
7.6.2	Water awareness campaigns on 2012 World Water Day	EMC (NA) Local subcontractor (TBD)	Activity completed	April, 2012

Activity 7.6 - Implementing Consumer-Targeted Awareness Programs: World Water Day, Water Quality, Conservation

LWWSS Communications and Outreach Specialist Nada Akl will coordinate with Nidal Hashisho, Head of Customer Service and Communications at the SLWE, in planning activities for World Water Day 2012 in March.

Activity Progress	O	N	D	J	F	M	A	M	J	J	A	S
Identify target audience, prepare awareness material and brief all stakeholders.				0%								
Conduct interactive activity, record impacts and report to USAID.						0%						

F. COLLABORATION WITH DONORS AND GOL OFFICIALS

Donor coordination is an essential part of LWWSS project planning and execution in order to (1) avoid unnecessary duplication, (2) identify specific areas of coordination and (3) identify areas where LWWSS can collaborate with other donors on specific projects or programs. The list of meetings with the GOL and other donors below provides a clear picture of this important program activity.

Meeting with Donor or GOL Official	Date	Attendees	Brief Synopsis of Meeting
ICMA	Oct 6, 2011	Judith Deilinger	Discussion of water, wastewater and local government in Lebanon
GIZ	Oct 17, 2011	Manfred Scheu, Nabil Chamaly, Sam Coxson, Jimmy Zammar, Nada Akl	Discussion of customer service training to ensure there is not overlap of training
USAID	Oct 18, 2011	Sana Saliba, Sam Coxson, Jimmy Zammar	Periodic project progress report
GIZ	Nov 3, 2011	Manfred Scheu, Nabil Chemaly, Sam Coxson, Jimmy Zammar, Ahmad Nizzam	Discuss of GIZ and LWWSS work plans for 2012
IOF	Nov 4, 2011	Heath Cosgrove, Sana Saliba, Sam Coxson, Jimmy Zammar	Presentation of Institute of Finance and IT Certificates of Completion

MOEW	Nov 17, 2011	Jimmy Zammar, Bassam Jaber, May Jurdi	Donors meeting and presentation by LWWSS-AUB on initial BWE water quality findings
NLWE	Nov 28, 2011	Heath Cosgrove, Sana Salaba, Sam Coxson, Jimmy Zammar, Jamal Krayem	Tour of NLWE water treatment plant and award of Certificates of Completion for pump station operators
USAID-GIS Presentation	Dec 1, 2011	COPs and Monitoring and Evaluation Staff	Presentation of the GIS portion of the PMPL
USAID	Dec 19, 2011	Sana Saliba, Sam Coxson, Jimmy Zammar	Periodic project progress meeting

G. CONTRACT DELIVERABLES

- Quarterly Report for fourth quarter

H. CHALLENGES, PROBLEMS, ISSUES

Capacity Building

LWWSS continues to encounter difficulty and delays in confirming training candidates, especially in critical areas such as financial operations and pump station operations. One problem is that many financial department employees are contract employees of a subcontractor to the WEs and not full-time regular employees. Selecting only full-time employees is the correct approach, but finding employees that can be allowed to miss work for even short periods of time makes the search and training more difficult and time consuming. In some cases, the personal contract employee may be trained if he or she has been in the position for a long period and has a good chance of being nominated to a full-time position.

LWWSS is mitigating this challenge by extending the time frames for training and training smaller classes, resulting in less work flow disruption while accomplishing the training for targeted WE employees.

I. MAJOR ACTIVITIES PLANNED FOR NEXT QUARTER

Anticipated activities for Quarter 2 (January – March 2012) are as follows:

Beka'a Water Establishment

- Continuation of the water quality management program, including on-site collection of water sampling by AUB (Component 2)
- Continued implementation of the ERP (Component 3)
- Continuation of the construction work started on the customer service center (Component 5)
- Drafting Expressions of Interest (EOI) for consulting engineering firm (Component 6)
- Customer service training for BMLWE customer service representative staff (Component 7)

Beirut-Mt. Lebanon Water Establishment

- Continued implementation of the ERP (Component 3)
- Continued manufacturing of the Jeita pump and motor procurement (Component 5)
- Completion of the Jeita valve and fittings procurement (Component 5)

North Lebanon Water Establishment

- Continuation of the generator and pump and motor procurement (Component 5)

- Drafting of Expressions of Interest (EOI) for consulting engineering firm (Component 6)

South Lebanon Water Establishment

- Continued update of the business plan to include all aspects of the National Water Sector Strategy (Component 4)
- Continuation of the Detailed and Advanced Pump Station Survey (Component 4)
- Commissioning of the atomic absorption equipment (Component 5)
- World Water Day Outreach and School presentations in Saida (Component 7)

ANNEX 1 LISTING OF DELIVERABLES BY COMPONENT BASED ON THE AMENDED TASK ORDER AS OF SEPTEMBER 30, 2011

Deliverable Title	Component or Components to Accomplish Deliverable
1. Initial Assessment	Component 1
2. Environmental Assessment Report	None-IEE and case by case requirements for EIAs
3. High Priority Intervention Plan	Component 1
4. Institutional Development Work Plans	General Deliverable—Annual Work Plan
5. Training Development Plans	General Deliverable-Annual Training Plan
6. O&M Outsourcing and procurement training	Component 2
7. Study tour programs on selected topics	Annual Training Plan
8. Operations and maintenance planning procedures and systems, long term preventive maintenance standards and guidelines	Component 2
9. Clear, well defined, and documented description of the different roles of the MOEW and the WEs and the business relationship between them	Component 4 - Business Plan (covering water supply) Component 3 – Pilot wastewater exercise (covering wastewater)
10. Recommendations for service standards that could be used as the basis for reviewing performance of subcontracting companies	Component 4 –Business Plan
11. Provide recommendations to extend the time frame for outsourcing to multi-year agreements	Component 4 – Business Plan
12. Provide the SLWE with a detailed pump station survey (entails quantity and quality testing as well as type of equipment, age, need for replacement), that will provide the basis for optimization of water supply, energy consumption and operational efficiency	Component 5
13. Provide an analysis and model agreement that water establishments can use in developing and negotiating service agreements with municipalities for wastewater collection system operation and maintenance	General Deliverable—Not a specific component
14. Provide specific recommendations to selected WEs in developing and implementing performance improvement plans that are a subpart of the adopted business plan.	Components 2 and 3
15. Training activities for staff and for senior and mid-level	Component 3

managers on financial management	
16. Introduction at selected WEs of improved financial and cost recovery systems	Component 3
17. Training on FAS and cost recovery model implemented under LWPP	Component 3
18. Long-term financial training plans for WEs	General Deliverable-Part of the Business Plan Development and Updating Process
19. Make specific recommendations for implementation of tariff strategies for cost recovery and long-term viability	Component 3
20. Corporatization procedures and recommendations	Component 3-Part of the business plan development process
21. Develop modern management and financial systems	Component 3
22. Develop business plans	Components 2 and 3
23. Study and recommendations on capital investment planning	General Deliverable-Merged with deliverable 22
24. Long- and medium-term capital investment plans	General Deliverable-Merged with deliverable 22
25. Training WE staff to build institutional and technical capacity to effectively monitor and manage capital investment planning	General Deliverable-Merged with deliverable 22
26. Conduct a detailed pump station survey in the SLWE as a model for other WEs and the MOEW to use in the development of a master plan; training of WE staff on master planning and priority setting based on needs and resources evaluation; recommendations to WE directors general based on the master planning process	Component 3 and general deliverable (business plan for capital planning aspects), some of this deliverable is being done by another donor (GIZ is working with the SLWE in developing the master plan as part of its work plan agreed to prior to the start of LWWSS)
27. Training of the WE staff on master planning and capital investment planning and budgeting	General Deliverable-the business plan portion is with LWWSS while the master plan portion is with GIZ.
28. Report and recommendations for selected WEs on the prioritization of projects according to needs, resources, duration and impacts.	General deliverable-merged with deliverable 26
29. Strengthened procurement planning procedures	Component 3
30. Report and recommendations on identification and assessment of local capabilities of design and engineering firms, construction management firms and suppliers.	Component 3
31. Manual on Establishing meaningful and measurable indicators to measure actual progress of construction projects	Component 3

32. Program management tools that allow data collection and analysis for proper project supervision and monitoring at technical and financial levels	Component 3-Part of the ERP program
33. Strengthened capacity at mid-level to inform these tools and at senior levels to use them for decision-making and specific actions to respond to problems	Component 3-Part of the ERP program
34. Procurement of selected equipment	Component 5
35. Construction of selected projects	Component 6
36. Defined mission statements for the WEs and for individual departments	General Deliverable-Part of the business plan development.
37. Public awareness plans and activities	Component 7
38. Training on corporate culture and customer service	Component 7
39. Establishment of customer reception office and guides to selected WEs	Component 7
40. Specific recommendations to selected WEs in implementing their service disconnection policy	Component 4 – Part of Business Plan for BMLWE and SLWE

ANNEX 2: YEAR THREE LWWSS ACTIVITIES BY COMPONENT

Item	Description	Beneficiary				Deliverable by end of Year Three	Deliverable Timeframe
		BMLWE	BWE	NLWE	SLWE		

Component 2: Capacity Building for Managerial, Technical and Operational Efficiency

2.1	Establishing and Building the Capacity of Metering Teams				✓		
2.1.1	Assist in identifying metering teams and assess training needs				✓	- Assessment conducted, recommendations issued to WE	September, 2012
2.1.2	Provide management team and field team training on metering				✓	- Training planned - Scope of Work defined	September, 2012
2.1.3	Provide technical assistance (studies, training, study tours) and/or technological tools for water demand management				✓	- Activity planned	September, 2012
2.2	Building the WEs' Water Quality Management Capacity		✓		✓		
2.2.1	Conduct water quality baseline survey based on seasonal sampling of all sources, with on-the-job staff training		✓			- Activity Completed - Assessment issued to BWE	May, 2012
2.2.2	Establish a region-specific and Libnor-compatible testing protocols and methodology		✓			- Completed, assessment issued to BWE	September, 2012
2.2.3	Plan and conduct a comprehensive user training on all aspects of lab operation		✓			- Activity planned	September, 2012
2.3	Build Pump Stations Operators Capacity in Operation and Maintenance		✓	✓			
2.3.1	Pump station operators basic O&M and H&S training (70+ staff)		✓	✓		- Activity completed in Year Two. Will be repeated in BWE to cover new staff.	September, 2012
2.3.2	Pump station operators advanced training in O&M			✓		- Activity completed - Follow-on in place	September, 2012
2.4	Capacity Building in Enhancing Administrative Performance	✓					
2.4.1	IT literacy training (Windows, Word, Excel, Access, Powerpoint) training aiming at increasing staff productivity	✓				- Training completed - Follow-up in place	September, 2012

Team

DAI: Sam Coxson, Jimmy Zammar, Ahmad Siddik, May Koleilat

CDM: Bassem Ghayda, Gulnard Ters, Elie Hreiz

EMC: Nada Akl, Mike Chalah

Legend

- ✓ Activities conducted wholly by LWSS
- Activities conducted in collaboration with other donors

- New activities for year three onward
- Completed activities

Item	Description	Beneficiary				Deliverable by end of Year Three	Deliverable Timeframe
		BMLWE	BWE	NLWE	SLWE		

Component 3: Increase Financial and Commercial Viability of Water Establishments

3.1	Upgrade Finance and Accounting Standards and Methods	✓	✓	✓			
3.1.1	Build the WE capacity in consolidating and issuing end of year financial reports	✓	✓			- Information collected - Reports produced	March, 2012
3.1.2	Training in Public Accounting, Finance, Procurement, Auditing	✓	✓	✓		- Training completed - Follow-up in place	February, 2012 (BWE) September, 2012 (NLWE)
3.1.3	Define cost centers, create/update chart of accounts, and accounting coding procedures	✓	✓	✓		- Information collected - New COAs and procedures defined	March, 2012 (BWE+BMLWE) September, 2012 (NLWE)
3.1.4	Develop procedures for asset and inventory identification, coding and valuation	✓	✓	✓		- Procedures defined with the WE	March, 2012 (BWE+BMLWE) September, 2012 (NLWE)
3.2	Integrate the WEs Financial, Accounting, Customer Service and Business Process Systems	✓	✓		✓		
3.2.1	Conduct business process mapping	✓	✓			- Workflow mapping completed and approved by WE	
3.2.2	Implement or upgrade Finance and Accounting System (FAS) and Customer Relationship Management (CRM) solution	✓	✓		✓	- Scope defined - Procurement and implementation started	August, 2012
3.2.3	Implement intranet system enabling web-browser based e-training, communication and business process tools	✓	✓		✓	- Scope defined - Procurement and implementation started	August, 2012
3.2.4	Conduct training, assist in transition phase and provide one/two year on site support	✓	✓		✓	- Training started	September, 2012
3.2.5	Supply and install time attendance machines and implement administrative and HR measures to increase HR efficiency		✓			- Core equipment installed +training in Year 2. - Two sets planned for Year Three.	September, 2012
3.3	Pilot Stakeholder Exercise to Sustain O&M of USAID WWTP		✓			- Assessment report	September, 2012

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Legend

- ✓ Activities conducted wholly by LWWSS
- Activities conducted in collaboration with other donors

- New activities for year three onward
- Completed activities

Item	Description	Beneficiary				Deliverable by end of Year Three	Deliverable Timeframe
		BMLWE	BWE	NLWE	SLWE		

Component 4: Capital Investment Planning and Program/Project Management

4.1	Increase Capacity in Business Planning, Capital Investment Planning and Benchmarking	•			✓		
4.1.1	Capacity building in planning and updating 5-year business plans, benchmarking and performance monitoring	•			✓	- Business plan prepared, issued to WE - Follow-up in place	
4.2	Implement Asset Survey, Inventory and Valuation				✓		
4.2.1	Pump-station inventory and valuation, in a format that is ready for integration into FAS, MMS and GIS				✓	- Activity completed in SLWE	June, 2012
4.2.2	Pump station equipment replacement packages for bidding by BWE				✓	- Activity completed in SLWE	June, 2012
4.2.3	O&M training needs assessment for pump-station operators				✓	- Activity completed in SLWE	June, 2012
4.3	Build Decision-Makers' Managerial Capacity in Water Utility Management	✓	✓	✓	✓		
4.3.1	Water utility management: conferences, workshops, specialist training and study tours	✓	✓	✓	✓	- Activities planned and undertaken	September, 2012
4.4	Master Planning		✓				
4.4.1	Water Supply and Sewerage Master plan		✓			- Activity SOW defined. - Services procured, Activity started	September, 2012

Component 5: Procurement of Technical Equipment to Strengthen WEs

5.1	Identifying Water Production and Contributing to Water Demand Management				✓		
5.1.1	Supply and install up to 218 production meters, fittings and protection box/manhole (all non-metered sources in WE)				✓	- Orders places, installation started	September, 2012

Team

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EMC: Nada Akl, Mike Chalah

Legend

- ✓ Activities conducted wholly by LWWSS
- Activities conducted in collaboration with other donors

■ New activities for year three onward

■ Completed activities

Item	Description	Beneficiary				Deliverable by end of Year Three	Deliverable Timeframe
		BMLWE	BWE	NLWE	SLWE		

Component 5: Procurement of Technical Equipment to Strengthen WEs (CONT'D)

5.2	Upgrading Pumping and Energy Efficiency	✓		✓	✓		
5.2.1	BMLWE: Jeita - Design equipment replacement and sand removal unit solution	✓				- Design Produced and Approved by BMLWE	
5.2.2	BMLWE: Jeita - Supply 18 pumps and motors (US made), associated valves, fittings and electrical panel boards	✓				- Equipment delivered to BMLWE	June 2012
5.2.3	SLWE: Test and design pumps, motors and associated works for the rehabilitation of selected stations				✓	- Design Produced and Approved by SLWE	September, 2012
5.2.4	SLWE: Supply and install pumps, motors and associated works for the rehabilitation of selected stations				✓	- Activity planned	September, 2012
5.2.5	NLWE: Test and design the replacement up to 20 submersible pumps, motors and other works in up to 15 stations			✓		- Procurement started	September, 2012
5.2.6	NLWE: Supply and install the replacement of up to 20 submersible pumps, motors and other works in up to 15 stations			✓		- Activity planned	September, 2012
5.2.7	Establish service agreements, and conduct user training programs for the above activities	✓		✓	✓	- Activity planned	September, 2012
5.3	Increasing Supply Hours to Areas Facing Supply Shortage			✓			
5.3.1	Supply and install up to 9 back-up generators for key NLWE stations			✓		- Procurement complete - Manufacturing complete, shipping started	September, 2012
5.3.2	Establish service agreements and conduct user training program for these generators			✓		- Activity planned	September, 2012
5.4	Upgrading the Water Analysis Laboratories		✓		✓		
5.4.1	Upgrade the water testing laboratories with infrastructure and equipment		✓		✓	- Procurement planned at BWE - Procurement completed in SLWE	September, 2012
5.4.2	Establish service agreements, and conduct user training programs for the above activities		✓		✓	- Activity planned in BWE - Activity completed in SLWE	September, 2012

Team



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CDM: Bassem Ghayda, Gulnard Ters, Elie Hreiz

EMC: Nada Akl, Mike Chalah

Legend

- ✓ Activities conducted wholly by LWSS
- Activities conducted in collaboration with other donors

-  New activities for year three onward
-  Completed activities

Item	Description	Beneficiary				Deliverable by end of Year Three	Deliverable Timeframe
		BMLWE	BWE	NLWE	SLWE		

Component 5: Procurement of Technical Equipment to Strengthen WEs (CONT'D)

5.5	Water Treatment and O&M Training		✓				
5.5.1	Install up to 20 UNICEF-supplied chlorinator units; Supply and install safety equipment and gas detection systems		✓			- Installation complete	
5.5.2	Training course for operators and year-long service and supply of consumables		✓			- Training conducted (done) - 1 year service agreement, consumables	September, 2012
5.6	Increase IT Infrastructure Efficiency	✓	✓		✓		
5.6.1	Assess and design IT infrastructure for WE headquarters and connectivity to branches	✓	✓		✓	- Report issued and adopted by SLWE	
5.6.2	Upgrade server installation and power supply infrastructure at head office and selected branches		✓		✓	- Scope defined - Procurement and implementation started	September, 2012
5.7	Upgrade the WE's Topographic Surveying Capacity				✓		
5.7.1	Supply high accuracy GPS-based topographic survey equipment (GNSS) and associated computer tools				✓	- Equipment delivered - Implementation and training completed	
5.7.2	Conduct user training, assist in transition phase and provide on site support				✓	- Training completed - Follow-up ongoing	
5.8	Establishing Direct Customer Interface		✓				
5.8.1	Design branch office and customer service center in WE's premises in Zahle		✓			- Design complete and approved by WE	
5.8.2	Implement interior works and furnish the new customer service center; connect IT systems to head office		✓			- Implementation complete - Project handed over to WE	May, 2012
5.8.3	Assist WE in reaching to customers and build staff capacity in customer service		✓			- Activity planned	September, 2012

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EMC: Nada Akl, Mike Chalah

Legend

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- Activities conducted in collaboration with other donors

-  New activities for year three onward
-  Completed activities

Item	Description	Beneficiary				Deliverable by end of Year Three	Deliverable Timeframe
		BMLWE	BWE	NLWE	SLWE		

Component 6: Small to Medium Scale Rehabilitation/Upgrade/Extension Water and Wastewater Works within WEs

6.1	Decreasing Water Losses and Upgrading Existing Networks		✓				
6.1.1	Design network upgrades in Zahle: rehabilitating up to 6 branch networks		✓			- Engineering consultant appointed - Engineering services started	September, 2012
6.1.2	Implement network upgrades in Zahle: rehabilitating up to 6 branch networks		✓			- Preparation for procurement started	September, 2012
6.2	Expanding Service Provision to Non-Served Areas			✓			
6.2.1	Beit Mellat, Akkar, North Lebanon: Design metered house connections to up to 18 villages			✓		- Scope defined, consultant appointed - Design complete	September, 2012
6.2.2	Beit Mellat, Akkar, North Lebanon: Implement house connections to up to 18 villages			✓		- Preparation for procurement started	September, 2012
6.2.3	Beit Mellat, Akkar, North Lebanon: Build WE capacity in increasing customer base and implementing consumer metering			✓		- Activity planned	September, 2012

Component 7: Corporate Culture, Customer Service Orientation, and Public Outreach



7.1	Building Customer Service Management Structure		✓				
7.1.1	Build a customer service staffing plan; Coordinate roles and responsibilities between HO and branches		✓			- Activity completed and proposals approved by WE	
7.2	Customer Service Management Capacity Building	✓	✓	✓			
7.2.1	Customer service training aiming at enhancing service effectiveness and increasing customer satisfaction	✓	✓			- Training provided - Follow-up in place	August, 2012
7.2.2	On-the-job capacity building in communication planning			✓		- Training provided - Follow-up in place	

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		BMLWE	BWE	NLWE	SLWE		

Component 7: Corporate Culture, Customer Service Orientation, and Public Outreach (CONT'D)

7.3	Develop Tools and Support WEs in Adopting Corporate Communication		✓	✓			
7.3.1	Design and Implement WE Brand Identity Guidelines			✓		- Activity completed	
7.3.2	Design and Implement WE Corporate Website			✓		- Activity completed	September, 2012
7.3.3	Develop and Adopt Customer Service Application Forms		✓			- Activity completed	March, 2012
7.4	Nation-Wide Customer Satisfaction Poll	✓	✓	✓	✓	- Activity completed in 2009 - Follow-on planned for 2013	Year Four
7.5	Youth Water Conservation Programs		✓		✓		
7.5.1	Elementary school outreach program in Zahle		✓			- Activity completed	
7.5.2	Elementary school outreach program in Jezzine				✓	- Activity completed	
7.6	Consumer-Targeted Awareness Programs: World Water Day, Water Quality, Conservation		✓	✓			
7.6.1	Collections- and conservation-related outreach activity for BWE (TV, radio, press, billboards)		✓			- Activity completed	
7.6.2	Water awareness campaigns on 2012 world water day			✓	✓	- Activity completed	April, 2012

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